

Appln No. 09/640,479

Amdt date February 6, 2004

Reply to Office action of November 10, 2003

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A vacuum ~~flourescent~~ fluorescent display comprising:  
a pair of substrates and side glasses surrounding an evacuated envelope;  
an electron emissive means for emitting electrons when a negative potential is applied;  
a display means provided on one of the substrates in the evacuated envelope for receipt of a positive potential applied thereto, and for displaying a predetermined image in response to electrons emitted from the electron emissive means; and  
an electron control means for generating a repulsive electric field when a negative potential is applied thereto to allow acceleration of electrons emitted from the electron emissive means in the direction of the display means,  
wherein the electron emissive means is located between the display means and electron control means.
2. (Previously Presented) The vacuum fluorescent display as recited in claim 1, wherein the electron control means is mounted on the substrate.
3. (Cancelled)

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4. (Original) The vacuum fluorescent display as recited in claim 2, wherein a negative potential is applied to the electron control means.

5. (Previously Presented) The vacuum fluorescent display as recited in claim 1, wherein the electron control means is a plurality of grids which are shaped as a mesh.

6. (Previously Presented) The vacuum fluorescent display as recited in claim 1, wherein the electron control means is a layer of a transparent electrically conductive material.

7. (Previously Presented) The vacuum fluorescent display as recited in claim 6, wherein the transparent electrically conductive material is tin doped indium oxide.

8. (Previously Presented) The vacuum fluorescent display as recited in claim 1, further comprising control electrode means, located near the electron emissive means, for control of trajectories of electrons emitted from the electron emissive means.

9. (Original) The vacuum fluorescent display as recited in claim 8, wherein either a positive or negative potential is applied to the control electrode means.

10. (Previously Presented) A method of producing an image on a vacuum fluorescent display, comprising:

providing a vacuum fluorescent display having an evacuated envelope enclosed by two substrates and side glasses, a display

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means provided on one of the substrates in the evacuated envelope, an electron control means, and an electron emissive means located between the display means and electron control means;

applying a negative potential to the electron emissive means to emit electrons;

applying a positive potential to the display means to attract the emitted electrons; and

applying a negative potential to the electron control means to repel and accelerate the emitted electrons toward the display means.

11. (Original) The method of claim 10 wherein the vacuum fluorescent display further comprises a control electrode, the method further comprising applying a potential to the control electrode to control the trajectory of the emitted electrons.

12. (Currently Amended) A vacuum ~~flourescent~~ fluorescent display comprising:

a pair of substrates and side glasses surrounding an evacuated envelope;

a display provided on one of the substrates in the evacuated envelope;

an electron controller including a plurality of grids, to allow repulsion and acceleration of electrons toward the display when a negative potential is applied thereto; and

an electron emitter located between the display and electron controller.

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13. (Previously Presented) The vacuum fluorescent display as recited in claim 12, wherein the electron controller is mounted on the substrate.

14. (Previously Presented) The vacuum fluorescent display as recited in claim 12 wherein the electron controller is shaped as a mesh.

15. (Previously Presented) The vacuum fluorescent display as recited in claim 12, wherein the electron controller is a layer of a transparent electrically conductive material.

16. (Previously Presented) The vacuum fluorescent display as recited in claim 15, wherein the transparent electrically conductive material is tin doped indium oxide.

17. (Previously Presented) The vacuum fluorescent display as recited in claim 12, further comprising  
a control electrode located near the electron emitter to control trajectories of emitted electrons.